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### **EUROPEAN PATENT APPLICATION**

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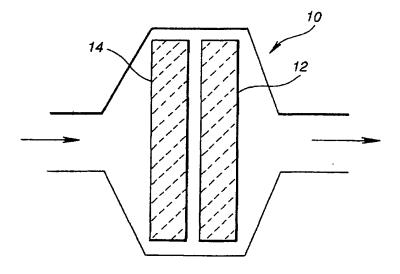
### (54) Device for purifying oxygen rich exhaust gas

(57) This device (catalytic converter) includes a NOx-adsorbing-and-reducing catalyst that is capable of adsorbing a NOx and accelerating a reduction of the adsorbed NOx into N<sub>2</sub>, within a NO<sub>2</sub>-forming temperature range where a reaction represented by the following formula proceeds,

2NO+O2→2NO2

wherein, within the NO<sub>2</sub>-forming temperature range, the concentration of hydrocarbons and/or carbon monoxide of the exhaust gas is varied at an inlet of the NOx-adsorbing-and-reducing catalyst, such that the adsorbed NOx is selectively reduced by the hydrocarbons and/or carbon monoxide into N<sub>2</sub>.

# FIG.1





## **EUROPEAN SEARCH REPORT**

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### ANNEX TO THE EUROPEAN SEARCH REPORT ON EUROPEAN PATENT APPLICATION NO.

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